

ABSTRACT OF THE DISCLOSURE

In one embodiment of the invention, a register format of a source register operated on by a source instruction in a source block of code is determined. The register format includes an input instruction format and an output block format of the source block of code. The source block of code runs in a source architecture. The source register has multiple formats and is used as an input of the source instruction. The input instruction format contains format of the source register expected by the source instruction. The output block format contains format of the source register after the source block of code is executed. An instruction format inconsistency is detected between the source register and a target register of a target architecture during a translation phase of a binary translation that translates the source block of code into a target block of code running in the target architecture.